Facility Management Standard (FMSFIE) Focus Group Meeting April $16-17,\,2002$

Patuxent River Naval Air Station, Maryland Minutes

Attendees:

- 1. Bobby Bean, Patuxent River Naval Air Station (PAX), phone: 301-757-1700, e-mail: beanra@navair.navy.mil
- 2. Penelope (Penny) Lumley, American Management Systems (AMS), phone: 703-227-6419, e-mail: Penelope_Lumley@amsinc.com
- 3. Barry Schimpf, Upper 90 Systems, Inc., phone: 301-373-8311, e-mail: bschimpf@upper-90.com
- 4. Chip Fleming, CADD/GIS Technology Center (EMA), phone: 601-634-2789, e-mail: Warren.D.Fleming@erdc.usace.army.mil
- 5. David Johnson, CADD/GIS Technology Center, phone: 601-634-3509, e-mail: Dave.M.Johnson@erdc.usace.army.mil
- 6. Bobby Carpenter, CADD/GIS Technology Center, phone: 601-634-4572, e-mail: Bobby.G.Carpenter@erdc.usace.army.mil
- 7. Jerry Unger, Eagan, McAlister & Associates (EMA)

Purpose of Meeting:

The purpose of the meeting was to expand the data model for the transactional Facility Management Standard (FMSFIE) Assets Entity Set/Facilities Class/Buildings Focus, and begin development of the transactional FMSFIE data model for the Assets Entity Set/Facilities Class/Utilities Focus. Copies of the meeting minutes and referenced slides are available under "FM Focus Group Meetings & Activities" and "Assets Entity Set Development" at:

http://tsc.wes.army.mil/products/tssds-tsfms/fms/projects/fmsfiepr.htm

Summary of Discussion:

Review/Discuss FMSFIE Assets Entity Set Development Support – A contract had been established for American Management Systems (AMS) to provide data modeling support to the CADD/GIS Technology Center for the transactional FMSFIE Assets Entity Set development effort during calendar year 2002. The contract Scope of Work (SOW) was reviewed and discussed. Upper 90 Systems, Inc. will provide support for enhancement of the current SDSFIE Browser, SQL Generator, & Access Builders software tools to support the transactional FMSFIE. The following target schedule was developed:

15th of each Month – AMS submit brief project progress & status report.

May 31, 2002 – AMS submit Final Draft Logical Data Models for Assets Entity Set/Facilities Class/Buildings Focus (cover Facilities & Assets "Parent" Tables, Architectural, Electrical, Plumbing, HVAC, Structural, Interior Design, Telecommunications, Fire Protection/Suppression, & Security).

Deliverable products to consist of ERWIN 3.5 data models and an Access 2000 database (with definitions).

June 12, 2002 – VTC meeting for review/discussion of Final Draft Logical Data Models for Assets Entity Set/Facilities Class/Buildings Focus

June 28, 2002 – AMS submit Draft Physical Data Models for Assets Entity Set/Facilities Class/Buildings Focus (cover Facilities & Assets "Parent" Tables, and at least Architectural). Deliverable products to consist of ERWIN 3.5 data models and an Access 2000 database (with definitions).

July 24 – 25, 2002 – FMSFIE Focus Group Meeting at PAX concerning FMSFIE Assets Entity Set development, review/update of FMSFIE Strategic Plan, and update on FMSFIE Work Entity Set development (Project No. 01.039).

July 31, 2002 – AMS submit Incorporate remaining DoD and Federal Legal Reporting Requirements (based upon Army IFS-M, Air Force IWIMS, Navy NFADB, U.S. Coast Guard, GSA, & OSD data elements available from:

http://tsc.wes.army.mil/products/tssds-tsfms/fms/projects/asset_fm_lrdr/asset_lrdr.htm

August 30, 2002 – AMS submit Logical Data Models for Assets Entity Set/Facilities Class/ Utilities Focus (based upon SDSFIE Utilities Entity Set & ESRI ArcGIS data models).

December 31, 2002 – Upper 90 submit Alpha transactional FMSFIE Browser.

Review/Discuss/Expand FMSFIE Assets Entity Set/Facilities Class/ Buildings Focus Logical Data Models – The logical data models supporting the Facilities and Buildings focus areas (Architectural, Structural, Electrical, Plumbing, HVAC, Fire Protection, Telecommunications, and Security) were reviewed and discussed. Items of discussion included:

- a. Include fields in transactional FMSFIE Microsoft Access database library for "Data Standard Source" and "Legal Reporting Requirement Source".
- b. Transactional FMSFIE tables can be linked to the SDSFIE features (Entity Types) and tables through the following:
- (1) The Asset model has an "Object Type" table. The attribute "object type identifier" is included as a FK in each Asset table. A georeference link (called "datalink" attribute in SDSFIE) could be added to the "Object Type" table for linking directly to the CADD or GIS graphic feature. The "Object Type" table will serve as an XREF table between transactional FMSFIE Assets and SDSFIE feature identifiers (called datalink in SDSFIE). Feature Type Identifier = Object Type Identifier.

- (2) The parent transactional FMSFIE "Asset" table will have an "asset_id" primary key (PK) data field. The "asset_id" can be added as a foreign key (FK) to all appropriate SDSFIE tables, thereby providing a directly link between the appropriate SDSFIE tables and the appropriate transactional FMSFIE Asset record.
- c. Include a "Room Number" attribute in the "Space" table.
- d. Definitions for all FMSFIE attribute tables, attributes, and domain values will be included in the Microsoft Access library and data dictionary.
- e. Include the following attributes in the "Space Usage Table":
 - (1) Organization ID
 - (2) User ID
 - (3) Net SF (inside wall area)
 - (4) Net SF/Gross SF
 - (5) Gross SF (building exterior wall, or footprint, area)
- f. Include the following attributes in the "Architectural Object Control Number" table:
 - (1) Serial No.
 - (2) Lot No.
 - (3) Control Number ID
- g. The "Asset Person Object Milestone" table tracks life cycle events for objects, etc.
- h. Need to include warranty information.
- i. Need to track "Alternate Assets" (e.g., walls, doors, etc. in a building)? The Building will be assigned an Asset ID. Will the walls, doors, windows, etc. be assigned an Alternate Asset ID?
- j. Permit the capability to track the GIS Map File Number, CADD Drawing File Number, Image Set No(s), and Media No(s). Some Assets may be depicted on both GIS and CADD graphic maps/drawings, have one or more photographs, scanned images, etc.
- k. Need to provide a table for recording the following temporal information concerning Assets?
 - (1) Object Status (Disposition) e.g., Permanent, temporary, and semi-permanent.
 - (2) Condition e.g., good, poor, fair, and excellent.
 - (3) Disposition e.g., existing, removed, and abandoned.
- 1. Need to provide a means for recording the following information concerning "Spaces":
 - (1) Parent Space Volume or space above office partitions, or inside building walls.
 - (2) Functional Use Space (Child Space Table) Office space, halls, etc.

- m. Information about the following will be included in the "Object Specification Table":
 - (1) Wall & Floor Coverings Surface Area.
 - (2) Space Square Footage.
- n. Address Attributes Are Postal Codes & Zip Codes unique?
- o. Will need to provide the logical and physical data models for the transactional FMSFIE on CD-ROM and FMSFIE website.

Review/Discuss/Expand FMSFIE Assets Entity Set/Facilities Class/ Utilities Focus Logical Data Models – The SDSFIE Utilities Entity Set, ESRI water distribution system data model, and Center/OGC Object data model for utilities were reviewed and discussed. Items of discussion included:

- a. Utilities are typically considered to stop 5 feet outside of buildings. From that point throughout each building, the utilities are considered to be associated with the building.
- b. Data in the transactional FMSFIE should be maintained separate for each utility, similar to current SDSFIE Entity Class organization.